Section - A

Multiple Choice Questions (MCQ'S)

Q.1 Choose the correct answer for each from the given options.

1. All the rays, parallel to the principal axis, falling on the concave mirror, pass after reflection through its ______________.
   (a) Pole (b) Principal focus
   (c) Centre of curvature (d) None of these
2. If the force acting on a body is doubled, then the acceleration produced is ________.
   (a) Quarter (b) Half (c) Same (d) Double
3. Dr. Abdul Salam was awarded Nobel Prize for his work on __________.
   (a) Electronics (b) Radiation
   (c) Gravitation (d) Grand unification theory
4. The reason for bursting water pipes during very cold weather is that:
   (a) Water pipe contract when cooled
   (b) Water expands on freezing
   (c) Ice expands on melting
   (d) None of these
5. The galvanometer can be converted into an ammeter by connecting a wire of low resistance.
   (a) In series (b) In parallel
   (c) With 220 volts (d) In combined way
6. In case of satellites the necessary acceleration is provided by _______.
   (a) Frictional force (b) Gravitational Force
   (c) Coulombs Force (d) None of these
7. The eye and the camera are similar because the image formed in both is __________.
   (a) Real and inverted (b) Real and erect
   (c) virtual and inverted (d) virtual and erect
8. The speed of light is ____________ m/s.
   (a) 3×10^6 (b) 3×10^8 (c) 1.6×10^6 (d) 3×10^{10}
9. Elasticity of a substance depends on its:
   (a) Temperature (b) Size (c) Nature (d) None of these
10. The speed of sound in air at normal temperature and pressure is ___ m/s.
    (a) 336 (b) 672 (c) 712 (d) 785
11. The standard metre is made of _______ and is placed at the international bureau of weight and measure in serves near Paris.
    (a) Platinum and copper (b) Iron and copper
    (c) Iron and iridium (d) Platinum and iridium.
12. Energy possessed by a body due to its position is called __________.
    (a) Potential energy (b) Mechanical energy
    (c) Kinetic energy (d) None of these
13. If the effort on the lever is between the fulcrum and weight, the class of lever is called __________.
    (a) First (b) Second (c) Third (d) None of these
14. The unit of force in S.I unit is __________.
    (a) Kilogram (b) Newton (c) Metre (d) Second
15. Clockwise torque is considered as ____________ torque.
    (a) Positive (b) Negative (c) Unit (d) Zero
16. The number of protons in the nucleus is called __________.
    (a) Mass number (b) Avogadro number
    (c) Atomic number (d) Nuclear number
17. The lightest particle in an atom is ______________.
    (a) Neutron (b) Electron (c) Proton (d) Deuteron